



HF Happenings 805

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Southern African Fauna and Flora <https://zsfaunaandflora.wordpress.com/>



HOSTED BY **SOUTH AFRICAN RADIO LEAGUE**

SARL HF Phone, Digital and CW contests in August

The aim of the SARL HF Contests is for participants to contact as many amateurs in Southern Africa as possible on the 20, 40 and 80 metre amateur bands.

The Phone contest takes place on Sunday 5 August, the digital contest on Sunday 19 August and the CW contest on Sunday 26 August. There are several trophies to be won for each contest as well as for overall results.

The SARL HF Phone Contest will be run from 14:00 to 17:00 UTC on Sunday 5 August 2018 with activity between 14 125 to 14 300 kHz; 7 063 to 7 100 and 7 130 to 7 200 kHz and 3 603 to 3 650 and 3 700 to 3 800 kHz. The exchange is a RS report and a consecutive serial number starting at 001.

The Silent Keys Memorial SSB Trophy is awarded to the amateur who achieves the highest score; the Joseph White Trophy is awarded to the amateur who achieves the highest score on any one band and the AKYAB Trophy is awarded to the amateur who achieves the highest score in his or her first year of phone (this amateur must have received his or her licence between 1 September 2017 to August 2018)

RSGB IOTA Contest

The upcoming weekend will see this year's edition of the RSGB IOTA Contest. For a comprehensive list of participating stations see www.ng3k.com/Misc/iota2018.html and for the rules visit www.rsgbcc.org/hf/rules/2018/riota.shtml



International Lighthouse and Lightship Weekend

The International Lighthouse and Lightship Weekend (ILLW) takes place of the weekend of 18 and 19 August 2018.

Namibia

The Swakopmund Lighthouse (ILLW NA0001) – Wynand, V51WW

South Africa

The North Head Lighthouse at Saldanha Bay (ILLW ZA0029) - the Bo-Karoo ARC, ZS3VDK (ZSFF-0343).

Robben Island Lighthouse (IOTA AF-064, ILLW ZA0008 and ZSFF-0322) - 17 to 20 August by ZS9V - Jan, ZS1VDV, Andre, ZS1AN, Johan, ZS1A, Allan ZS1LS, Oleg ZS1OIN and Oleg, ZS1ANF.



The Green Point Lighthouse in Cape Town (ILLW ZA0006) - the Cape Town Amateur Radio Centre, ZS1CT. This is their 21st year in the ILLW. The Slangkop Lighthouse at Kommetjie (ILLW ZA0015) - the False Bay ARC ZS1FRC.

The Cape Point Lighthouse (ILLW ZA0013 new lighthouse and ZA0014 old lighthouse) - Gregory, ZS1EZ, Ursula, ZS1UP and Terence, ZR1ACI.

The Cape Hangklip Lighthouse near Betty's Bay (ILLW ZA0010) - the Cape Radio Group, ZS1CRG with six operators.

The Danger Point Lighthouse near Gansbaai (ILLW ZA0005) the Overberg ARC, ZS1OAR.

The Cape Agulhas Lighthouse situated at L'Agulhas, (ILLW ZA0011, ZSFF-0002) - the Boland ARC with special call sign ZS70BAK – the Club is celebrating its 70th birthday.

The Cape Recife Lighthouse south of Port Elizabeth (ILLW ZA0022) - Bill, ZS2ABZ

The Hill Lighthouse/Donkin Reserve in Port Elizabeth (ILLW ZA0023) – the Port Elizabeth ARS, ZS2PE

The Green Point Lighthouse at Umzinto (ILLW ZA0018) - the Highway ARC, ZS5HAM.

The Cooper Light at Brighton Beach, Durban (ILLW ZA0004) - the Durban ARC, ZS5D.

Baker Island, KH1/KH7Z

The OQRS is up and running on Club Log. According to the final statistics, the team on Baker Island made 68 972 QSOs with 18 128 unique callsigns (26,28%).

Breakdown by continents

AS 29 046 QSOs 42,11%

NA 25 253 QSOs 36,61%

EU 11 914 QSOs 17,27%

OC 2 333 QSOs 3,38%

SA 333 QSOs 0,49%

AF 93 QSOs 0,14%

Breakdown by modes

CW 32 432 QSOs 47,02%

SSB 18 903 QSOs 27,41%

FT8 16 671 QSOs 24,17%

RTTY 926 QSOs 1,40%

Unsurprisingly, given the team's announced plan to maintain a 24/7 presence there, 20 m was the most productive band with 27 568 QSOs (39,97%), followed by 17 m – 11 796, 15 m – 8 091, 40 m – 7 563, 30 m – 6 616, 80 m – 2 996, 12 m – 1 912, 160 m – 1 706, 10 m - 557 and 60 m - 167.

African DX

Contacts with stations on the African continent count towards the SARL's All Africa Award (www.sarl.org.za/public/awards/awards.asp)

Malawi, 7Q. Alex, IW5ELA will be active as 7Q7ELA from 17 to 26 September. Operation on HF using mainly CW. QSL via home call. Activity from these locations – 17 to 20 September at Game Haven Lodge, 20 to 23 September at Mvuu Camp and 23 to 26 September at Makokola Retreat.

Rwanda, 9X. The Italian DXpedition Team is planning to be active from Rwanda between 26 September and 10 October as 9X0T. For FT8 DXpedition mode the call 9X0Y will be used. Operation from 160 to 10 metres using CW and SSB with 3 stations. RTTY will be used only on 20 metres. QSL via I2YSB. Real-time log search and OQRS see www.i2ysb.com/idx/

July

25 - Closing date for August Radio ZS

27 to 29 – Winter Celebration, Hogsback

28 – Namibian Amateur Radio League

AGM; Cape Town ARC AGM; Closing date for RaDAR logs; Closing date QRP contest logs

28 and 29 - RSGB Islands on the Air (IOTA) contest

29 - Closing date for ZS2 Sprint logs

August

2 to 5 – Ramsgate Book and Art Festival

3 to 5 – West Coast Craft Exhibition, Velddrif; Slow Food and Wine Festival, Robertson

4 Aug to 2 Sept – Clanwilliam Wild Flower Festival

5 – SARL HF Phone Contest

8 to 15 – YOTA 2018 Summer Camp in South Africa

9 – National Women's Day; SARL YL Sprint

12 – International Youth Day

13 - closing date for HF Phone contest logs

16 – closing date YL Sprint logs

18 and 19 – Lowveld Book Festival, White River; The Chocolate Festival, Stellenbosch; International Lighthouse and Lightship Weekend

19 – SARL HF Digital Contest; World Humanitarian Day

22 - Eid-al-Adha

23 – closing date for articles for the September Radio ZS

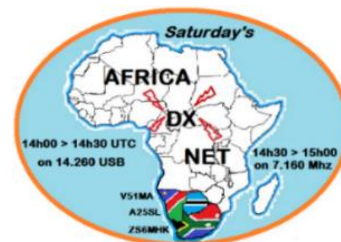
24 to 25 - Hantam Vleisfees, Calvinia

24 to 26 – Magalies Rocks the Cradle Festival, Magaliesburg

25 – Cape Town ARC Meeting; Pretoria ARC AGM and Flea Market

26 – SARL HF CW Contest

27 – closing date for HF Digital logs



African Islands

IOTA frequencies

CW: 28 040 24 920 21 040 18 098 14 040 10 114 7 030 3 530 kHz

SSB: 28 560 28 460 24 950 21 260 18 128 14 260 7 055 3 760 kHz

Cape Verde, D4. Christian, MOUPL will be active as D44EK from Sal Island (AF-086), Cape Verde from 23 July to 7 August. He will operate SSB on the HF bands. QSL via home call.

Mauritius, 3B8. Karel, OK2ZI pays Mauritius (AF-049) a visit between 26 July and 8 August. He will be active as 3B8/OK2ZI on HF using CW, SSB and digital modes. QSL via OK2ZI, direct or via the bureau, ClubLog OQRS, LoTW.

Mauritius, 3B8. Hans, PA3HGT will once again be operating as 3B8/PA3HGT from 4 to 24 September. Operation in 'holiday-style' on 40, 20 and 10 metres using mostly SSB with some CW and digital. QSL via home call, direct or bureau.

AF-078 Carabane Island. Alfredo, IK7JWX and team are planning a humanitarian DXpedition for 10 days in November 2018. Call sign is pending.

AF-118 Los Farallones Island. Plans are underway for an international team of IOTA activators. Dates and full info to follow.

The Solar Cycle

The sun has more than just the 11-year cycle for sunspots. According to a short article by Scientific American, other cycles of length 88, 200 and 2 400 years have been noted www.scientificamerican.com/article/the-sunspot-cycle-is-more-intricate-than-previously-thought/. The 11-year cycle that we're most attuned to is called the Schwabe cycle, discovered in 1843 by German astronomer Samuel Schwabe. The longer-duration solar cycles were discovered from isotope information recovered from cores drilled from ice built up over the last 9 000 years.

WRTC 2018

The World Radiosport Team Championship, held in Germany in parallel with the IARU HF World Championship, is now history. Gedas Lucinskas, LY9A and Mindis Jukna, LY4L are the new world champions; Manfred Wolf, DJ5MW and Stefan von Baltz, DL1IAO are the runners-up, and the bronze medallists are the defending champions Chris Hurlbut, KL9A and Daniel Craig, N6MJ. An Excel file with the complete results can be downloaded from <https://wrtc.info/wrtc2018-final-results/>.

- | | |
|------------------------|------------------------|
| 1. Y81N LY9A LY4L | 21. Y83V N9RV N6TR |
| 2. Y81A DJ5MW DL1IAO | 22. Y84O R8CT UA4FER |
| 3. Y82V N6MJ KL9A | 23. Y82D HA8RT DK6SP |
| 4. Y81M F8DBF F1AKK | 24. Y84P OH6KZP OH6UM |
| 5. Y86Q LZ4AX LZ3FN | 25. Y86C RW1A RA1A |
| 6. Y84Z OM3BH OM3GI | 26. Y84Q K3LR DL1QQ |
| 7. Y89A S50A S57AW | 27. Y81R RW7K UB7K |
| 8. Y89R US2YW UW7LL | 28. Y87U SM5AJV SM3SGP |
| 9. Y84W 9A7DX 9A3LG | 29. Y83L K1DG N2NT |
| 10. Y82G IZ3EYZ IK4VET | 30. Y89U K9VV VE3EJ |
| 11. Y87O N2NL W2SC | 31. Y87G DL2CC DK9IP |
| 12. Y83O ES5TV ES2RR | 32. Y82A YO8SCA S55M |
| 13. Y81D UROMC VE3DZ | 33. Y86Y VA2EW DL1CW |
| 14. Y87W YO8TTT UT5GW | 34. Y83P N5AW K5WA |
| 15. Y87M N4YDU N3KS | 35. Y81K UA2FB RA2FA |
| 16. Y81U 9A1UN 9A6XX | 36. Y89D DL4NAC DL8DYL |
| 17. Y87C K1LZ YO9GZU | 37. Y84B EA2OT EA8RM |
| 18. Y84X K6XX WA6O | 38. Y84Y K2PO KU1CW |
| 19. Y82F E77DX 9A5K | 39. Y83C LU1FAM YO9WF |
| 20. Y82K W2GD AA3B | 40. Y86O OM2VL OM3RM |

41. Y84C JH5GHM WA1Z
 42. Y87K OK2ZI OK2ZC
 43. Y87L PY1NX PY2SEX
 44. Y83B LZ5VK RW4WR
 45. Y83U N4TZ N1UR
 46. Y82L N6XI AE6Y
 47. Y82N YV1DIG RA9USU
 48. Y83X 4X6FR 4X1DX
 49. Y83K KE3X KD4D
 50. Y82M F4DXW F8CMF
 51. Y86J EC2DX EA5KA
 52. Y89M ZL3CW F6BEE

53. Y84J RC9O UA9PM
 54. Y82B AD4Z NP4Z
 55. Y87V VE7CC VE7SV
 56. Y83Z CE2LR KG5HVO
 57. Y84G UN9LW UN9L
 58. Y89N ZL3IO ZL4YL
 59. Y86W K3PA N3AD
 60. Y82W E73A 4O3A
 61. Y86P E21EIC 9M2ZAK
 62. Y86V OR2F ON5RA
 63. Y87B VY2ZM KK6ZM

Awards were also given to the SSB Leaders VY2ZM and KK6ZM, the CW Leaders ES5TV and ES2RR, the Multiplier Leaders again ES5TV and ES2RR, the Accuracy Leaders OR2F and ON5RA, as well as the Best Youth Team YO8TTT and UT5GW. See www.wrtc2018.de/ for more information, including the videos of the opening and closing events.

WRTC 2022

Tine Brajnik, S50A, President of the WRTC Sanctioning Committee, announced that the organization of the World Radiosport Team Championship 2022 has been granted to the Italian Host Committee. The competition will be held in the Emilia-Romagna region.

Contest Calendar

This week's contests as compiled by Bruce Horn, WA7BNM. The period covered is 23 to 30 July 2018

SKCC Sprint

00:00 - 02:00 UTC 25 July
 Geographic Focus: Worldwide
 Participation: Worldwide
 Awards: Worldwide
 Mode: CW
 Bands: 160, 80, 40, 20, 15, 10 m
 Classes: (none)
 Exchange: RST, state, province or country, name and SKCC no or power
 Work stations: Once per band
 QSO Points: (see rules)
 Multipliers: Each state, province, or country once
 Score Calculation: Total score = (total QSO points x total mults) and bonus points
 Submit logs by: 23:59 UTC 29 July 2018
 E-mail log summary to: (none)
 Post log summary at: www.skccgroup.com/operating_activities/weekday_sprint/submit-display.php
 Mail logs to: (none)
 Find rules at: www.skccgroup.com/operating_activities/weekday_sprint/

Phone Fray

02:30 - 03:00 UTC 25 July
 Geographic Focus: North America
 Participation: Worldwide
 Mode: SSB
 Bands: 160, 80, 40, 20, 15 m
 Classes: Single Op
 Max power: 100 watts

Exchange: NA: Name and state, province or country; non-NA: Name

Work stations: Once per band

QSO Points: NA station: 1 point per QSO; non-NA station: 1 point per QSO with an NA station

Multipliers: Each US state (including KH6/KL7) once per band; Each VE province/territory once per band; Each North American country (except W/VE) once per band

Score Calculation: Total score = total QSO points x total mults

Submit logs by: 03:00 UTC 27 July 2018

E-mail logs to: (none)

Post log summary at: www.3830scores.com

Mail logs to: (none)

Find rules at: www.perluma.com/Phone_Fray_Con-test_Rules.pdf

CWops Mini-CWT Test

13:00 - 14:00 UTC and 19:00 - 20:00 UTC 25 July and 03:00 - 04:00 UTC 26 July

Geographic Focus: Worldwide

Participation: Worldwide

Awards: Worldwide

Mode: CW

Bands: 160, 80, 40, 20, 15, 10 m

Classes: Single Op - QRP, low or high

Max power: HP: >100 watts; LP: 100 watts; QRP: 5 watts

Exchange: Member: Name and member no; non-Member: Name and state, province or country

Work stations: Once per band
QSO Points: 1 point per QSO
Multipliers: Each call once
Score Calculation: Total score = total QSO points x total mults
Submit logs by: 04:00 UTC 28 July 2018
Post log summary at: www.3830scores.com
Mail logs to: (none)
Find rules at: www.cwops.org/cwt.html

RSGB 80 m Club Championship, Data
19:00 UTC-20:30 UTC 26 July
Geographic Focus: United Kingdom
Participation: Worldwide
Awards: United Kingdom
Mode: RTTY, PSK
Bands: 80 m Only
Classes: (none)
Exchange: RST and serial no
QSO Points: 1 point per QSO
Multipliers: (none)
Score Calculation: (see rules)
Submit logs by: 23:59 UTC 27 July 2018
Upload log at: www.rsgbcc.org/cgi-bin/hfenter.pl
Mail logs to: (none)
Find rules at: www.rsgbcc.org/hf/rules/2018/r80mcc.shtml
Classes: Single Op - fixed or portable 10 W; Single Op - fixed or portable 3 W; Multi-Op - fixed or portable 10 W; Multi-Op - fixed or portable 3 W
Exchange: RST, serial no and power
QSO Points: 15 points per QSO with QRP portable/mobile station; 10 points per QSO with QRP fixed station; 5 points per QSO with non-QRP station
Multipliers: (none)
Score Calculation: Total score = total QSO points
Submit logs by: 23:59 UTC 23 July 2018
Upload log at: www.rsgbcc.org/cgi-bin/hfenter.pl
Mail logs to: (none)
Find rules at: www.rsgbcc.org/hf/rules/2018/rgrp.shtml

QRP Fox Hunt
01:00 - 02:30 UTC 27 July
Geographic Focus: United States
Participation: Worldwide
Mode: CW
Bands: 20 m Only
Classes: Single Op - fox or hound
Max power: 5 watts
Exchange: RST, state, province or country, name and power output
QSO Points: 1 point per QSO
Multipliers: (none)
Score Calculation: Total score = total QSO points
Submit logs by: 02:30 UTC 28 July 2018

E-mail logs to: (see rules)
Mail logs to: (none)
Find rules at: www.qrpfoxhunt.org/summer_rules.htm

NCCC RTTY Sprint
01:45 - 02:15 UTC 27 July
Geographic Focus: North America
Participation: Worldwide
Mode: RTTY
Bands: (see rules)
Classes: (none)
Exchange: Serial no, name and QTH
Score Calculation: Total score = total QSO points x total mults
Submit logs by: 29 July 2018
E-mail logs to: (none)
Post log summary at: www.3830scores.com/
Mail logs to: (none)
Find rules at: www.ncccsprint.com/rttyns.html

NCCC Sprint
02:30 - 03:00 UTC 27 July
Geographic Focus: North America
Participation: Worldwide
Mode: CW
Bands: (see rules)
Classes: (none)
Exchange: Serial no, name and QTH
Score Calculation: Total score = total QSO points x total mults
Submit logs by: 29 July 2018
E-mail logs to: (none)
Post log summary at: www.3830scores.com/
Mail logs to: (none)
Find rules at: www.ncccsprint.com/rules.html

RSGB IOTA Contest
12:00 UTC 28 July to 12:00 UTC 29 July
Geographic Focus: Worldwide
Participation: Worldwide
Mode: CW, SSB
Bands: 80, 40, 20, 15, 10 m
Classes: Single Op 12 hrs - Island fixed, Island DXpedition or world - CW, SSB or mixed - QRP, low or high; Single Op 24 hrs - Island fixed, Island DXpedition or world - CW, SSB or mixed - QRP, low or high; Single Op Assisted 12 hrs - Island fixed, Island DXpedition or world - CW, SSB or mixed - QRP, low or high; Single Op Assisted 24 hrs - Island fixed, Island DXpedition or world - CW, SSB or mixed - QRP, low or high; Multi-Single - Island fixed or Island DXpedition - QRP, low or high; Multi-Two - Island fixed or Island DXpedition - QRP, low or high
Max power: HP: 1 500 watts; LP: 100 watts; QRP: 5 watts

Exchange: RS(T), serial no and IOTA no (if applicable)
 Work stations: Once per band per mode
 QSO Points: (see rules)
 Multipliers: Each IOTA reference once per band per mode
 Score Calculation: Total score = total QSO points x total mults
 Submit logs by: 3 August 2018
 E-mail logs to: (none)
 Upload log at: www.rsgbcc.org/cgi-bin/hfjenter.pl
 Mail logs to: (none)
 Find rules at: www.rsgbcc.org/hf/rules/2018/ri-ota.shtml

YARC Summer QSO Party
 16:00 – 21:59 UTC 28 July
 Geographic Focus: United States/Canada
 Participation: Worldwide
 Mode: CW, SSB, Digital
 Bands: 160, 80, 40, 20, 15, 10, 6, 2, 222, 432, Internet
 Classes: Single Op - QRP, low or high; Multi-Single - QRP, low or high; Multi-Multi - QRP, low or high
 Max power: HP: >200 watts; LP: 200 watts; QRP: 15 watts
 Exchange: State, province or DX and 4-digit year licensed
 Work stations: Once per band per mode
 QSO Points: 1 point per digital QSO; 2 points per CW QSO; 3 points per phone QSO

Multipliers: Each state/province/1 DX once;
 WY4RC: Once per band per mode for QSOs with WY4RC/#
 Score Calculation: Total score = total QSO points x total QTH mults x total WY4RC mults
 Submit logs by: 15:59 UTC 12 August 2018
 E-mail logs to: (see rules)
 Upload log at: (see rules)
 Mail logs to: (see rules)
 Find rules at: <https://yarc.world/index.php/yarc-contests/yarc-summer-qso-party-2018/>

ARS Flight of the Bumblebees
 17:00 - 21:00 UTC 29 July
 Geographic Focus: North America
 Participation: Worldwide
 Mode: CW
 Bands: 40, 20, 15, 10 m
 Classes: Home-Based; Bumblebee
 Max power: 5 Watts
 Exchange: Home: RST, state, province or country and power; Bumblebee: RST, state, province or country and Bumblebee no
 Work stations: Once per band
 QSO Points: 1 point per QSO
 Multipliers: (none)
 Score Calculation: Total score = total QSO points x total Bumblebees x 3
 Submit logs by: 12 August 2018
 E-mail logs to: ARSBumblebees@gmail.com
 Mail logs to: (none)
 Find rules at: www.arsgrp.blogspot.com/

Downloadable contest award certificates in PDF and JPEG formats

Downloadable contest award certificates in PDF and JPEG formats are now available for some recent ARRL contests on the ARRL website and more will be available in the future <http://contests.arrl.org/certificates.php>. Just type in your call sign and press Go. The website will even show certificates for the station call of multi-operator efforts where the typed call sign was submitted as one of the operators. As of this publication, the following contests support certificate download:

2017 ARRL 10 GHz and Up Contest
 2017 IARU HF Championship
 2017 ARRL 222 MHz and Up Distance Contest
 2017 ARRL September VHF Contest
 2017 November Sweepstakes
 2017 ARRL 10 Metre Contest
 2017 160 Metre Contest
 2018 RTTY Roundup
 2018 January VHF Contest

According to Bart, W9JJ, ARRL Contest Branch Manager, "The new online certificates will offer enhanced content over what has been previously available on ARRL certificates. New recognitions have been added for Top 10 participants in a broader number of geographical (country, Division, Section) or categorical entries." www.arrl.org/news/more-arrrl-contest-award-certificates-now-available-for-download

The RXSHARE audio switch

DX Engineering announces the RXSHARE audio switch, which allows two channels of audio from one or two radios to be split between two operators www.dxengineering.com/techarticles/dxepressreleases/dx-engineering-rxshare-audio-switch-for-multi-and-single-operator-contesting-now-available. According to DX Engineering, each operator uses a three-position switch to select "one, the other, or both channels of audio." This device requires no DC power and audio levels are controlled by transceiver AF controls. For more information, see the DX Engineering website www.dxengineering.com/search/product-line/dx-engineering-rxshare-audio-switch?autoview=SKU&keyword=RXSHARE&sortby=BestKeywordMatch&sortorder=Ascending.

The Serial Box

Bob, N6TV, announces the release of the "Serial Box" (S-BOX), which is a "configurable, passive nine-pin serial port Y-splitter and amplifier interface box." According to Bob, it can provide automatic frequency tracking and band change information from a nine-pin serial connector on a modern transceiver to compatible amplifiers made by Elecraft, ACOM, or SPE. The unit also features four configurable PTT outputs. Bob has made information, schematics, and photos available online <https://www.kkn.net/~n6tv/S-BOX/>

Next Week's Contests

Phone Fray, 02:30 - 03:00 UTC 1 August
CWops Mini-CWT Test, 13:00 - 14:00 UTC and 19:00 - 20:00 UTC 1 August and 03:00 - 04:00 UTC 2 August
NRAU 10 m Activity Contest, 17:00 - 18:00 UTC (CW) and 18:00 - 19:00 UTC (SSB) and 19:00 - 20:00 UTC (FM) and 20:00 - 21:00 UTC (Dig) 2 August
SKCC Sprint Europe, 19:00 - 21:00 UTC 2 August
QRP Fox Hunt, 01:00 - 02:30 UTC 3 August
NCCC RTTY Sprint, 01:45 - 02:15 UTC 3 August
NCCC Sprint, 02:30 - 03:00 UTC 3 August
10-10 International Summer SSB Contest, 00:01 UTC 4 August to 23:59 UTC 5 August
European HF Championship, 12:00 - 23:59 UTC 4 August
North American CW QSO Party, 18:00 UTC 4 August to 05:59 UTC 5 August
SARL HF Phone Contest, 14:00 - 17:00 UTC 5 August
ARS Spartan Sprint, 01:00 - 03:00 UTC 7 August

Word to the Wise

Receiver Desensing. Desensing is the overloading of receivers by very strong signals on frequencies near to the desired receiving frequencies, limiting or preventing reception on the desired frequency. This can be an acute problem when a receiver is used close to broadcast television, AM/FM, or commercial transmitters, as might be the case during roving operations from hills or summits. Usually, the stronger the field strength of the interfering signal, the farther away the interfering signal can be in frequency and still have an effect.

4 Port Coax Relay project

Ham Radio Workbench has posted a podcast www.hamradioworkbench.com/podcast/4-port-coax-relay-project-design on the design of their 4 Port Coax Relay project www.hamradioworkbench.com/4-port-coax-relay.html. A completed unit was on display at their booth during Hamvention. The over-two-hour podcast discusses the trade-offs in the various portions of the design that might be useful when designing your own projects.

Operating Tip

Core Strength. A lack of core strength can cause your body to want to slouch at the operating position. Slouching at the operating position is bad for your back, shoulders and neck and causes pain. Pain can hinder your operating enjoyment and limit your operating time. Too much pain and your body will start to compensate by trying to use other muscles to sit in other bad positions, which can cause other parts of your body to have pain. Avoid entering this vicious cycle by keeping your core strong. While there are plenty of how-to's for core strengthening, none of the good ones are performed while sitting in a chair <https://www.wiki-how.com/Strengthen-Your-Core>.

Triangulating arbitrary HF signals

Triangulating arbitrary HF signals is just a few web-site clicks away. Using a new feature of the global crowdsourced network of Kiwi-SDR receivers, multiple receiving sites can be chosen www.rtl-sdr.com/kiwisdr-tdoa-direction-finding-now-freely-available-for-public-use/. Receiver IQ data is collected and analysed, a map of potential transmitter locations can be displayed. The Time Difference of Arrival method does a very reasonable job when there are multiple receiving stations, all can hear a ground wave from the transmitter.

C++ Builder toolset

Embarcadero has announced the free community edition of their C++ Builder toolset, for most hobby scenarios www.embarcadero.com/products/cbuilder/starter?utm_source=article&utm_medium=web&utm_campaign=contest_update. Some Amateur Radio Software, for example the EXTFSK RTTY library, are dependent on long-obsolete versions of Borland's *C++ Builder*, which is an ancestor of the Embarcadero product <http://hamsoft.ca/pages/mmtty/ext-fsk.php>. With the new availability of these tools for hobbyist use, Builder-dependent packages can now be maintained and enhanced by a broader population of Amateur experimenters.

Items used with acknowledgement to the ARRL Letter, the ARRL DX News, the ARRL Contest Update, OPDX Bulletin, 425 DX Bulletin, DXNL Newsletter, WIA-News, the RSGB News, DxCoffee, Southgate ARC News, DX World and the Amateur Radio Newsletter

